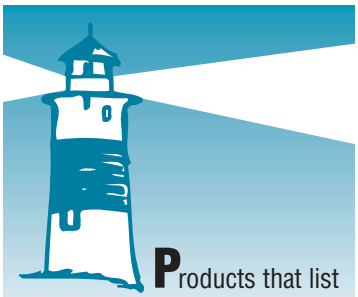
# Degreasing / Parts Washing

## Potential Environmental Impacts:

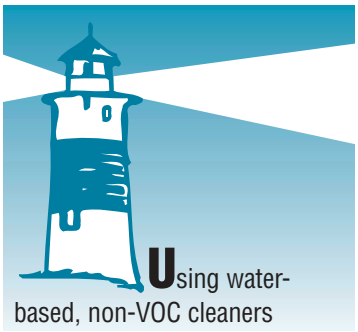
Degreasers used to clean metal parts may be organic solvents (chlorinated or non-chlorinated) or water-based cleaners. Organic solvents usually contain volatile organic compounds (VOCs) which can evaporate quickly. Many VOCs combine with combustion emissions to form ground level ozone, a major component of "smog." Ozone damages lungs and degrades many materials. When solvents are released and reach water, even in very small quantities, they may render the water unfit for human consumption and uninhabitable for aquatic life. Many organic solvents are also combustible, which may pose a fire hazard.

## Legal Requirements:

- A hazardous waste determination must be conducted to establish whether or not disposal of waste solvents and parts washer solutions is subject to hazardous waste regulations [40 CFR 262.11; RCSA §22a-449(c)-102(a)(2)(A)]. A hazardous waste determination must also be conducted on any materials used to clean a spill. Manage hazardous waste as described in Appendix B.
- If there is a stormwater discharge from your facility, you may have to register for a *General Permit for the Discharge of Stormwater Associated with Industrial Activity* ("Stormwater General Permit"). See Appendix F for more information.
- See "Rags" fact sheet for more information on managing solvent-soaked rags.
- Any parts washer that uses VOCs at room temperature must follow these equipment design and operating procedures [RCSA §22a-174-20(l)]:
  1. The cover must be easily operated with one hand and closed whenever the parts washer is not being used for 2 minutes or more.
  2. Parts must be covered during draining.
  3. Waste solvent must be stored in covered containers.
  4. Cleaned parts must be drained for at least 15 seconds, or until dripping ceases, whichever is longer.
  5. Degreasing solvent must be sprayed as a compact fluid stream (not a fine, atomized, or shower type) and at a pressure which does not exceed 10 psi.
  6. Operation must cease at the occurrence of any visible solvent leaks.
  7. Post labels on or near each unit summarizing the applicable operating requirements.
  8. Keep monthly records on the amount of solvent added to each unit.



**P**roducts that list compounds with ***"…chloro…"*** are chlorinated compounds, most of which are hazardous due to their toxicity. Many non-chlorinated organic solvents and common parts washer solutions such as petroleum naptha or mineral spirits are also typically hazardous due to their ignitability.



Using water-based, non-VOC cleaners instead of solvent-based degreasers may help minimize your facility's regulatory burdens and waste disposal costs.

## Best Management Practices:

- ✪ Use water-based, non-VOC cleaners that are less hazardous than solvent-based degreasers. They are also less toxic and non-flammable. Don't use a toxic or flammable organic solvent if you don't have to.
- ✪ If using VOC-based solvents is unavoidable, catch excess solvents in a pan and reuse.
- ✪ Do not mix or add other types of solvents to any degreaser.
- ✪ Never discard any degreasing solvent into sinks, floor drains or onto the ground. It will ultimately find its way to local waters, and as little as a thimble full may render thousands of gallons of water uninhabitable for aquatic life or unfit for human consumption. You may be held responsible for remediation costs.
- ✪ The CT-DEP is aware of the following companies that can provide less hazardous parts washing systems. This list is not comprehensive and the CT-DEP does not endorse these vendors or services over any others:

| COMPANY NAME | LOCATION | PHONE NUMBER |
|---|---|---|
| Buckeye International, Inc. | | (800) 321-2583, ext. 270 |
| Chem-Station New England | South Windsor, CT | (860) 291-2863 |
| Clayton Assoc., Inc. | Lakewood, NJ | (800) 248-8650, ask for Sales |
| EnviroSolutions | Milford, CT | (203) 876-2570, (800) 452-0080 |
| Hubbard Hall Service | Waterbury, CT | (203) 756-5521 or (800) 648-3412 |
| Safety-Kleen Service | West Hartford, CT | (860) 953-4222 |
| System One | East Windsor, CT | (800) 711-1414, ext. 417 |
| ZEP Manufacturing | Cheshire, CT | (203) 272-1559 |

## Checklist for Clean Marina Certification:

✔ Do you use water-based, non-VOC degreasers and part washers, where practical?

**YES** **NO** **N/A**